*An Account of a Family having Hands and Feet with supernumerary Fingers and Toes. By* Anthony Carlisle, *Esq. F.R.S. In a Letter addressed to the Right Hon. Sir* Joseph Banks, *Bart. K.B. P.R.S.* Read December 23, 1813. [*Phil. Trans.* 1814, *p.* 94.]

These instances of supernatural formation are traced, by the author's inquiries, through four successive generations, from Zerah Colburn, the American calculating boy, to his great grandmother, whose maiden name had been Kendall, but of whose brothers, sisters, or parents, the present generation possess no record.

This woman had five fingers and a thumb on each hand, and six toes on each foot.

She had eleven children, ten of whom are said to have had the same peculiarity complete; but one daughter, the grandmother of the present boy, had one of her hands naturally formed.

Of the next generation there were four persons. Abiah, the boy's father, and two others, had the peculiarity complete; but one of his uncles was like the grandmother, with one hand natural.

The present generation are eight in number, of whom four are naturally formed as their mother is; the rest, including Zerah the calculator, have the peculiarity complete, with the exception of his eldest brother, who has one of his feet naturally formed.

It appears to Mr. Carlisle, that these instances are sufficiently rare to be added to the numerous cases on record of peculiar structures continued by hereditary descent, in the hope that a greater accumulation of facts may enable future physiologists to trace, in some degree, the laws which govern such productions; more especially if attention be paid to the relative influence of the male and female sex in the propagation of peculiarities.

*Experiments and Observations on the influence of the Nerves of the eighth Pair on the Secretions of the Stomach. By* B. C. Brodie, *Esq. F.R.S. Communicated by the Society for the Promotion of Animal Chemistry.* Read February 10, 1814. [*Phil. Trans.* 1814, *p.* 102.]

Former experiments having shown that when the functions of the brain are destroyed the secretory organs invariably ceased to perform their office, and consequently that the various secretions were probably dependent on nervous influence, it appeared desirable to ascertain this point by dividing the nervous branches by which some one gland is supplied, and observing the effect. But on account of the difficulty of the operation itself, and of the injury done to adjacent parts, it appears extremely difficult to determine the real influence of the nerves in the natural state of all the functions. There are, however, some experiments on the preternatural secretion excited by the action of arsenic, and its interruption by division of the nerves, which the author thinks may deserve to be recorded as tending to elucidate so important a subject.

Mr. Brodie had formerly observed in dogs poisoned by arsenic, a very copious secretion of mucus and watery fluid from the coats of the stomach and intestines, and so rapidly excited, that he conceived this to be a favourable instance for observing the effect of dividing those nerves which supply the stomach.

He consequently divided the nerves of the eighth pair, with the accompanying sympathetic nerves in the neck of a dog, and immediately afterwards inserted ten grains of arsenic into a wound in the thigh. The symptoms which usually appear from the poison of arsenic were soon produced; but though the dog lingered under this treatment three hours and a half, none of that watery mucus observable in other instances of death by arsenic was found in the stomach and intestines, though both stomach and intestines were found much inflamed.

In a second experiment, during nine hours that the dog lingered under the effects of the arsenic applied also to a wound, no such secretion had taken place.

In the third instance, the dog was made to swallow a solution of arsenic, with the same result, after he had lingered three hours.

Since in the preceding trials, respiration was disturbed in consequence of the injury done to the nerves supplying the thorax, a fourth experiment was made by dividing the lower branches of the eighth pair after their passage through the thorax, where they appear in the œsophagus, just above the cardiac orifice of the stomach. In this mode of operating the respiration was not affected; but still the symptoms and visible effects of the arsenic were the same as before, without any fluid evacuations from either the stomach or intestines.

From these experiments, the author thinks it hardly possible to avoid the conclusion, that the suppression of these secretions was owing to the division of the nerves; and that the secretions from the stomach, in general, must be much under the controul of the nervous system. But it appears premature to deduce any conclusion respecting their influence over other secretions.

*On a fossil human Skeleton from Guadaloupe.* *By* Charles König, *Esq. F.R.S.* *In a Letter addressed to the Right Hon. Sir* Joseph Banks, *Bart. K.B. P.R.S.* Read February 10, 1814. [*Phil. Trans.* 1814, *p.* 107.]

The skeleton described in this letter was contained in a mass of stone nearly two tons in weight, brought home by Sir Alexander Cochrane, and presented by the Admiralty to the British Museum. The existence of such skeletons had been mentioned by General Ernouf, in a letter to Faujas St. Fond, published in the fifth volume of the *Annales du Museum;* and also by Lavaisse, in his *Voyage à la Trinidad.* The block brought home by Sir Alexander Cochrane agreed very correctly with the description given by General Ernouf, measuring 8 feet by $2\frac{1}{2}$, having very much the appearance of a huge nodule separated from a surrounding mass, without any marks of a